

WHAT IS CLAIMED IS:

1. A power controller for a computer system having a microprocessor therein, wherein the power controller receives a voltage identification signal transmitted from the microprocessor, the power controller comprising:

5 a first voltage identification digital/analogue converter for receiving the voltage identification signal and outputting a first voltage specification signal;

a second voltage identification digital/analogue converter for receiving the voltage identification signal and outputting a second voltage specification signal; and

10 a selector coupled to the first identification digital/analogue converter and the second identification digital/analogue converter for outputting the voltage specification signal from the first voltage identification digital/analogue converter or the second voltage identification digital/analogue converter.

15 2. The power controller of claim 1, wherein the selector is a multiplexer that couples with the first voltage identification digital/analogue converter and the second voltage identification digital/analogue converter for receiving the microprocessor selection signal and outputting the first voltage specification signal or the second voltage specification signal.

3. The power controller of claim 1, wherein the microprocessor includes Intel's Coppermine processor or Intel's Tualatin processor.

20 4. The power controller of claim 3, wherein the first voltage identification digital/analogue converter outputs the first voltage specification signal according to a VRM 8.4 specification.

5. The power controller of claim 3, wherein the second voltage identification digital/analogue converter outputs the second voltage specification signal according to a VRM 8.5 specification.

6. The power controller of claim 1, wherein the power controller also produces a terminal voltage according to a microprocessor selection signal.

7. The power controller of claim 1, wherein the microprocessor includes AMD's K7 desktop processor or AMD's K7 portable processor.

8. The power controller of claim 7, wherein the first voltage identification digital/analogue converter outputs the first voltage specification signal according to a VRM 9.0 specification.

9. The power controller of claim 8, wherein the second voltage identification digital/analogue converter outputs the second voltage specification signal according to a AMD K7 portable voltage identification digital/analogue converter specification.

10. A power controller for a computer system having a microprocessor selected from a panel of processors, wherein the computer system outputs a microprocessor selection signal and a microprocessor type signal according to the particular microprocessor, the power controller comprising:

a plurality of voltage identification digital/analogue converters for receiving a voltage identification signal from the particular microprocessor and outputting a plurality of voltage identification signals; and

a selector coupled to the voltage identification digital/analogue converters and outputting one of the voltage identification signals according to the microprocessor selection signal and the microprocessor type signal, wherein each voltage identification

digital/analogue converters corresponds with one type of the microprocessor for producing a voltage specification signal that suits the particular processor.

11. The power controller of claim 10, wherein the selector includes a multiplexer coupled to the voltage identification digital/analogue converters for outputting one of the voltage specification signals.

12. The power controller of claim 10, wherein the microprocessor includes Intel's Coppermine processor, Intel's Tualatin processor, AMD's K7 desktop processor and AMD's K7 portable processor.

13. The power controller of claim 12, wherein the voltage identification digital/analogue converters includes a VRM 8.4 voltage identification digital/analogue converter, a VRM 8.5 voltage identification digital/analogue converter, a VRM 9.0 voltage identification digital/analogue converter and a K7 portable voltage identification digital/analogue converter.

14. The power controller of claim 10, wherein the power controller also provides a terminal voltage for the particular microprocessor according to the microprocessor selection signal and the microprocessor type signal.

15. A computer system capable of supporting a multiple of processor types, comprising:

a first microprocessor socket for plugging a microprocessor; and

a power controller coupled to the first microprocessor socket for receiving a voltage identification signal from the microprocessor and a microprocessor selection signal from the computer system so that the computer system can provide a core voltage to the microprocessor, wherein the power controller determines type of microprocessor plugged in the socket according to the microprocessor selection signal, if the

microprocessor belongs to a first type of microprocessor, the power controller outputs a first voltage specification signal as well as a first terminal voltage, and if the microprocessor belongs to a second type of microprocessor, the power controller outputs a second voltage specification signal as well as a second terminal voltage.

5           16. The computer system of claim 15, wherein the power controller further includes:

          a first voltage identification digital/analogue converter for receiving the voltage identification signal and outputting a first voltage specification signal that meets the requirement of the first type microprocessor; and

10           a second voltage identification digital/analogue converter for receiving the voltage identification signal and outputting a second voltage specification signal that meets the requirement of the second type microprocessor.

15           17. The computer system of claim 16, wherein the power controller further includes a multiplexer that couples with the first voltage identification digital/analogue converter and the second voltage identification digital/analogue converter and outputs the first voltage specification signal or the second voltage specification signal.

20           18. The computer system of claim 15, wherein the first type microprocessor includes Intel's Coppermine processor, the second type microprocessor includes Intel's Tualatin processor, the first identification digital/analogue converter outputs a first voltage specification signal according to VRM 8.4 specification, and the second voltage identification digital/analogue converter outputs a second voltage specification signal according to VRM 8.5 specification.

          19. The computer system of claim 15, wherein the first type microprocessor includes AMD's K7 desktop processor, the second type microprocessor includes

AMD's K7 portable processor, the first identification digital/analogue converter outputs a first voltage specification signal according to VRM 9.0 specification, and the second voltage identification digital/analogue converter outputs a second voltage specification signal according to AMD K7 portable specification.

5           20. The computer system of claim 15, wherein the system further includes a second microprocessor socket with the microprocessor plugged either into the first microprocessor socket or the second microprocessor socket, the power controller receives a microprocessor type signal from the computer system, the power controller further comprising:

10           a third voltage identification digital/analogue converter for receiving the voltage identification signal and outputting a third voltage specification signal that meets requirements for a third type microprocessor; and

15           a fourth voltage identification digital/analogue converter for receiving the voltage identification signal and outputting a fourth voltage specification signal that meets requirements for a fourth type microprocessor, wherein the power controller determines type of microprocessor according to the microprocessor selection signal and the microprocessor type signal, if the microprocessor belongs to a third type processor, the power controller outputs the third voltage specification signal as well as a third terminal voltage, and if the microprocessor belongs to a fourth type processor, the  
20           power controller outputs the fourth voltage specification signal as well as a fourth terminal voltage.